certain mixture of Orpiment and *Viridi Æris* in a due proportion, the mixture loſt its purple tincture, and became perfectly dun. But the Experiment ſucceeded beſt without Minium thus. To Orpiment I added by little and little a certain full bright purple, which Painters uſe until the Orpiment ceaſed to be yellow, and became of a pale red. Then I diluted that red by adding a little *Viride Æris*, and a little more blue Biſe than *Viridi Æris*, until it became of ſuch a grey or pale white, as verged to no one of the Colours more than to another. For thus it became of a Colour equal in whiteneſs to that of Aſhes or of Wood newly cut, or of a Man's Skin. The Orpiment reflected more Light than did any other of the Powders, and therefore conduced more to the whiteneſs of the compounded Colour than they. To aſſign the proportions accurately may be difficult, by reaſon of the different goodneſs of Powders of the ſame kind. Accordingly as the Colour of any Powder is more or leſs full and luminous, it ought to be uſed in a leſs or greater proportion.

Now conſidering that theſe grey and dun Colours may be alſo produced by mixing whites and blacks, and by conſequence differ from perfect whites not in Species of Colours but only in degree of luminouſneſs, it is manifeſt that there is nothing more requiſite to make them perfectly white than to increaſe their Light ſufficiently; and, on the contrary, if by increaſing their Light they can be brought to perfect whiteneſs, it will thence alſo follow, that they are of the ſame Species of Colour with the beſt whites, and differ from them only in the quantity of Light. And this I tryed as follows. I took the third of the above-mentioned grey mixtures (that

(that which was compounded of Orpiment, Purple, Biſe and *Viride Æris*) and rubbed it thickly upon the floor of my Chamber, where the Sun ſhone upon it through the opened Caſement; and by it, in the ſhadow, I laid a piece of white Paper of the ſame bigneſs. Then going from them to the diſtance of 12 or 18 Feet, ſo that I could not diſcern the unevenneſs of the ſurface of the Powder, nor the little ſhadows let fall from the gritty particles thereof; the Powder appeared intenſly white, ſo as to tranſcend even the Paper it ſelf in whiteneſs, eſpecially if the Paper were a little ſhaded from the Light of the Clouds, and then the Paper compared with the Powder appeared of ſuch a grey Colour as the Powder had done before. But by laying the Paper where the Sun ſhines through the Glaſs of the Window, or by ſhutting the Window that the Sun might ſhine through the Glaſs upon the Powder, and by ſuch other fit means of increaſing or decreaſing the Lights wherewith the Powder and Paper were illuminated, the Light wherewith the Powder is illuminated may be made ſtronger in ſuch a due proportion than the Light wherewith the Paper is illuminated, that they ſhall both appear exactly alike in whiteneſs. For when I was trying this, a Friend coming to viſit me, I ſtopt him at the door, and before I told him what the Colours were, or what I was doing; I askt him, Which of the two whites were the beſt, and wherein they differed? And after he had at that diſtance viewed them well, he anſwered, That they were both good whites, and that he could not ſay which was beſt, nor wherein their Colours differed. Now if you conſider, that this white of the Powder in the Sun-ſhine was compounded of the